

40024349.121834

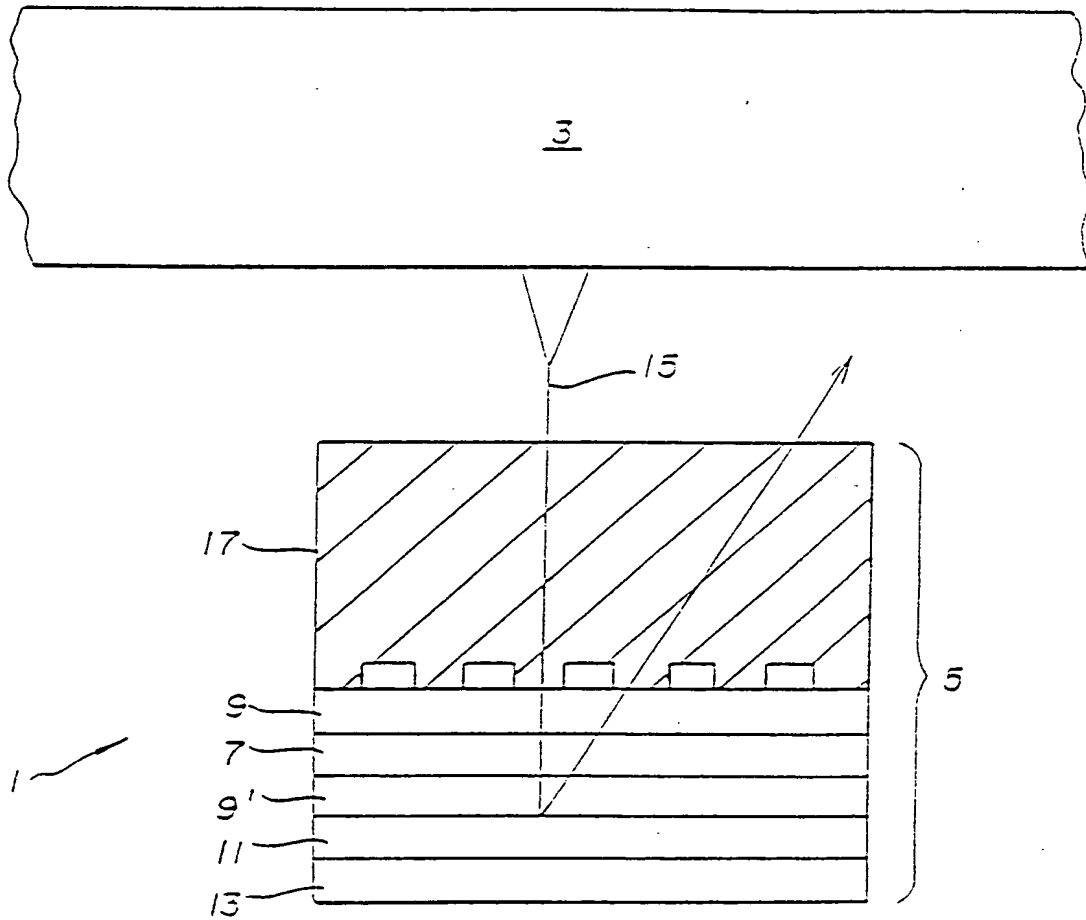


Fig. 1

FIG. 2 is a cross-sectional view of a device.

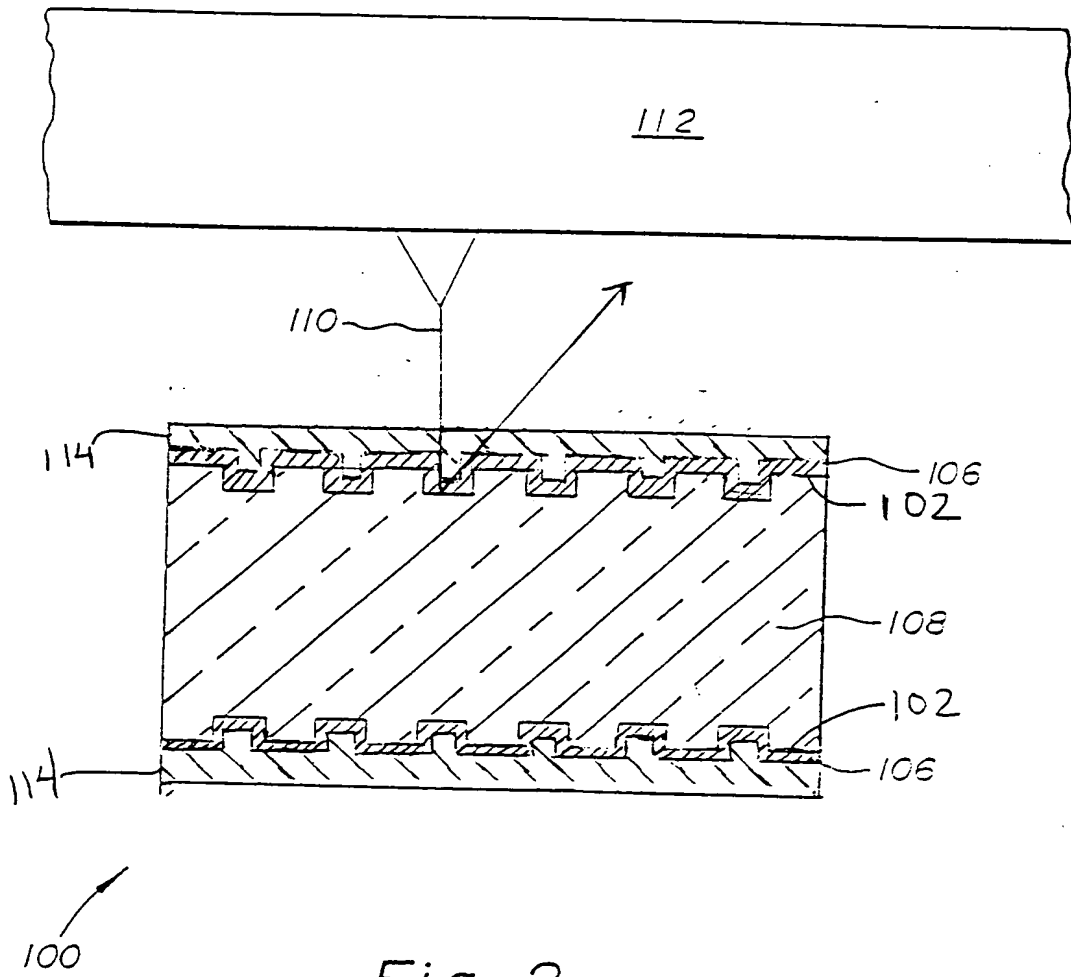
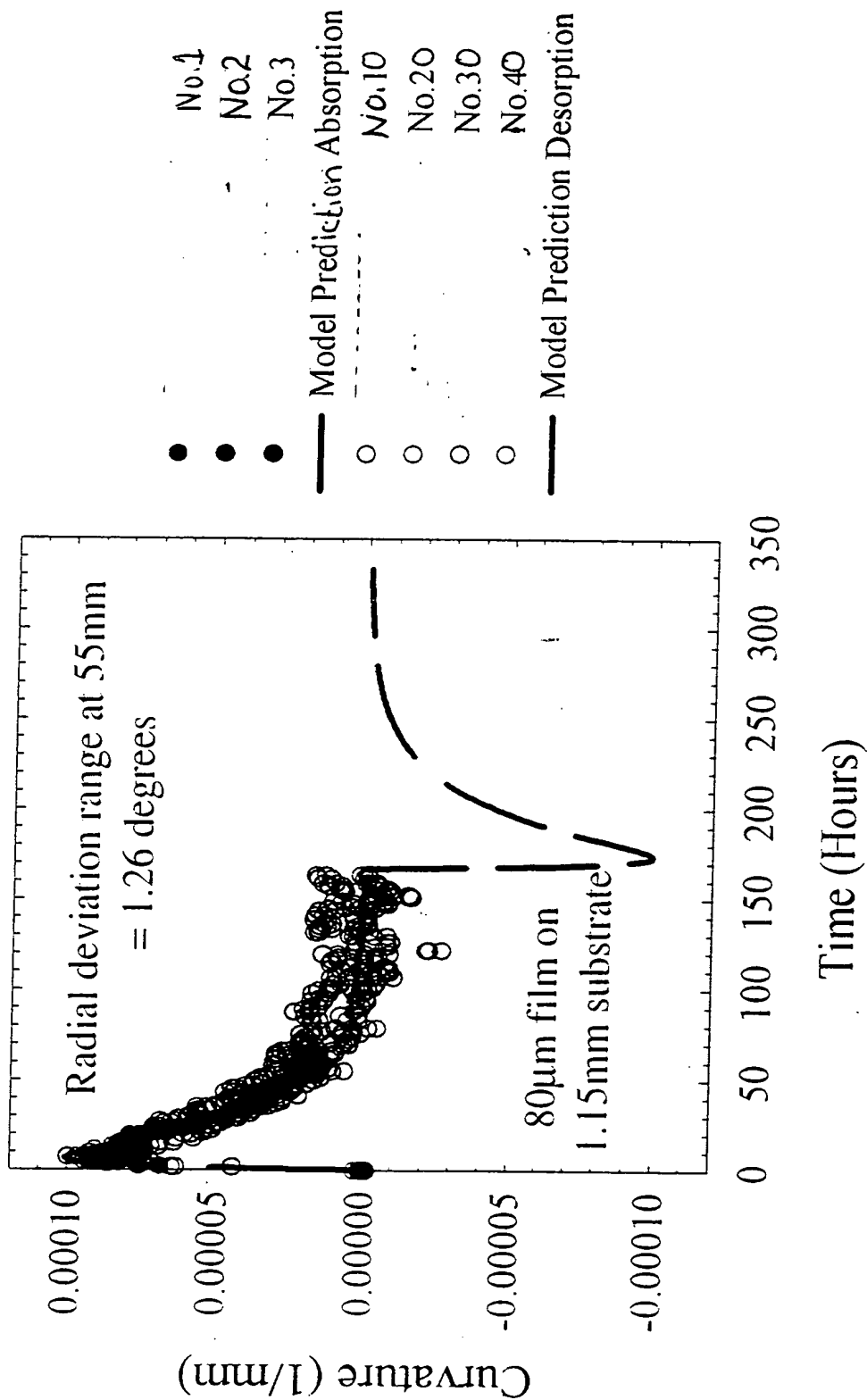


Fig. 2

Figure 3

25°C and 50% rh - 25°C and 90% rh - 25°C and 50% rh



$$\text{Radial Deviation (deg)} = 360 \cdot \text{Curvature} \cdot \text{radius} / \pi$$

TOP SECRET

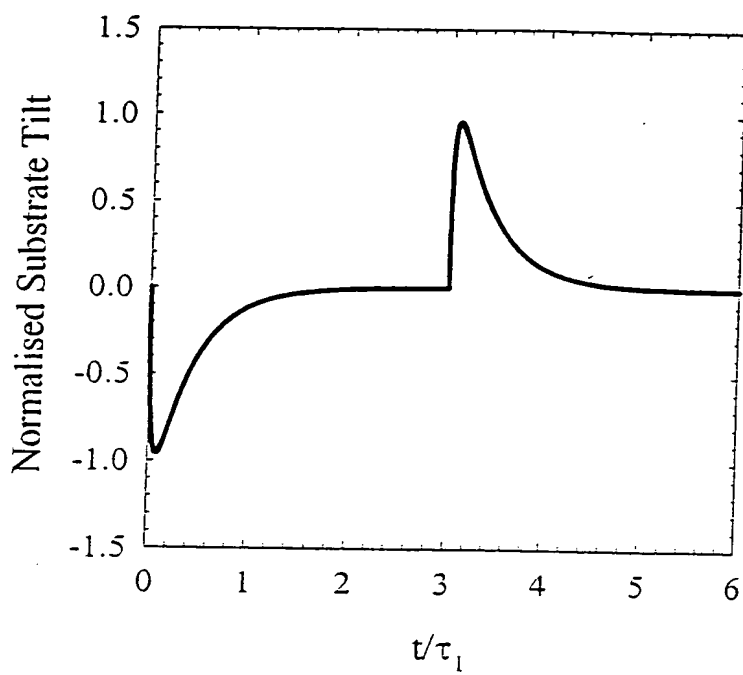


FIGURE 4

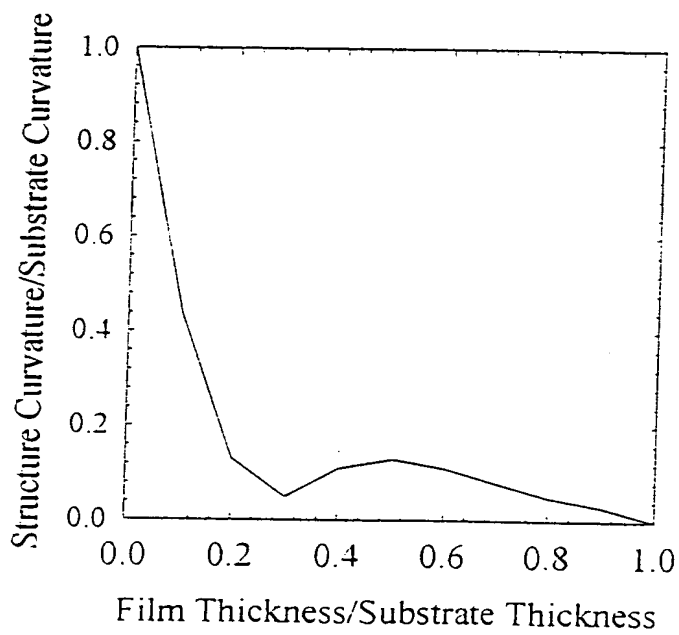


FIGURE 5

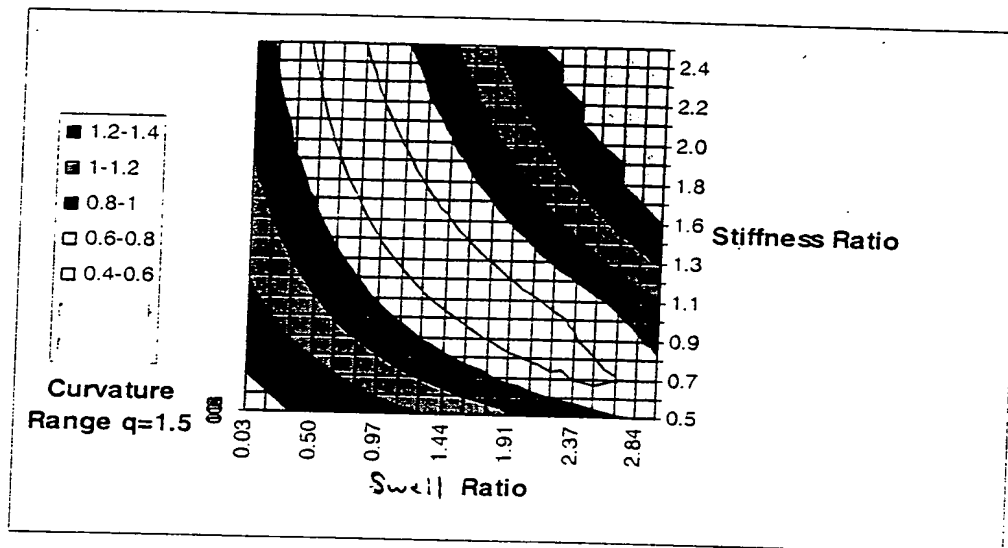


Figure 6. Curvature Ratio Contour Map at a diffusion ratio of 1.5.

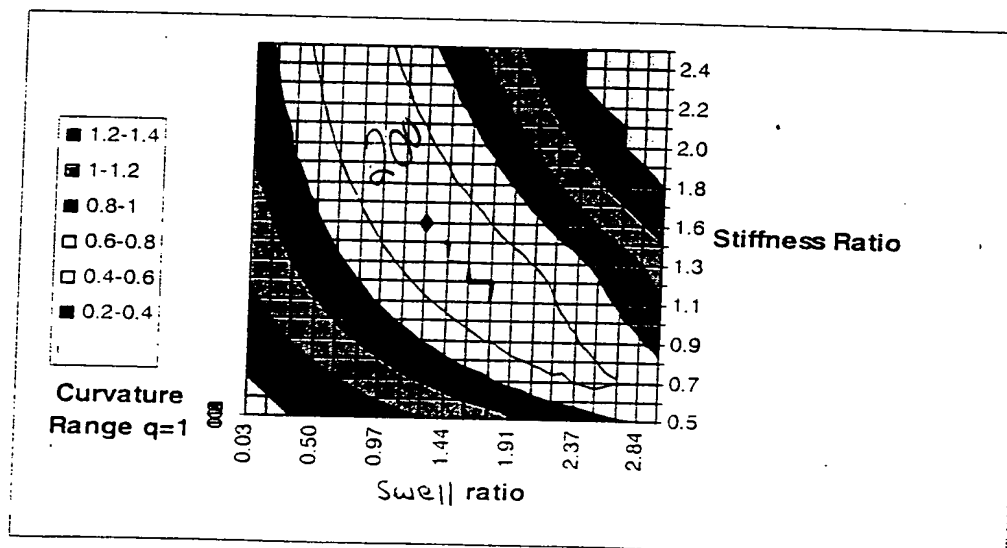


Figure 7. Curvature Ratio Contour Map at a diffusion ratio of 1.

Figure 8
Mismatched System - identical substrate

25°C and 50% rh - 25°C and 90% rh - 25°C and 50% rh

Film Ratios			
Thickness	ρ		0.070
Stiffness	γ		1.3985496
Swell	δ		1.9999845
Diffusivity	q		0.930049

60% reduction in
radial deviation range

